

Claims

The claims defining the invention are as follows:

1. A method of providing ligamentory like support between two spaced locations in the body of a patient wherein the locations comprise ligament and/or muscle tissue comprising fixing an anchor in each location, connecting the anchors by a filamentary element, adjusting the tension of the filamentary element between the locations to establish the desired spatial relationship between the locations to provide at least a supplementary ligamentory support between the locations.
2. cancelled
3. A method as claimed at claim 1 or 2 wherein the anchors are provided with a retaining means adapted to be able to retain the filamentary element in a state of tension between the anchors.
4. A method as claimed at claim 3 wherein the retaining means enables movement of the filamentary element through the anchor to enable the length of the filamentary element between the locations to be shortened but to prevent movement of the filamentary element through the anchors to enable the length of the filamentary element between the applications to be increased.
5. A method as claimed at any one of the preceding claims wherein the filamentary element is not biodegradable over a period of time and is adapted to facilitate the growth of tissue between the locations to provide said ligamentory support between the locations.
6. A method as claimed at any one of the preceding claims wherein the anchor comprises a head having a configuration facilitating insertion into the tissue and retention of the head in the tissue once inserted, the anchor further having a base which is intended to receive the filamentary element, said method comprising inserting the head of the anchor into the tissue with the base buried in the tissue.

installing an anchor into the holder, placing the anchor in position in the tissue by manipulation of the appliance and on location of the anchor in the tissue, activation of the manipulation means to cause displacement of the anchor from the holder.

13. A method as claimed at any one of the preceding claims wherein the spaced locations comprise the recto-vaginal ligaments or the arcus tendineus ligaments to each side of the vagina and the method resides in the re-establishing of the fascial support for the vagina, said method comprising fixing said anchors into the recto-vaginal ligaments or the arcus tendineus ligaments respectively to each side of the vagina, applying the filamentary element between the anchors and introducing the filamentary element into the fascial tissue such that with time it will become embodied with the fascia and optimally tensioning the filamentary element between the anchors.
14. A method as claimed at any one of the preceding claims wherein the filamentary element is applied to at least one of the anchors prior to fixation.
15. A method as claimed at claim 14 wherein the filamentary element is applied to a pair of anchors prior to fixation at a spacing greater than the desired spatial relationship.
16. A method of providing ligamentary like support between two spaced locations in the body of a patient substantially as herein described.
17. A tissue anchor formed of a material which is compatible for location in human and/or animal muscle and/or ligament tissue, the anchor comprising a base and a head, the head having a configuration to facilitate insertion of the head into the tissue and retention of the head in the tissue once inserted, the base formed with an aperture adapted to receive a length of a filamentary element and permit slideable movement of the filamentary element through the aperture in one direction but to restrict movement of the filamentary element through the aperture in the opposite direction.

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25. A tissue anchor as claimed at any one of claims 18 to 24 wherein the space has a part annular configuration.
26. A tissue anchor as claimed at any one of claims 18 to 25 wherein the space is located substantially centrally across the central longitudinal axis of the anchor.
27. A tissue anchor as claimed at any one of claims 18 to 26 wherein the face of the locking member proximate the one direction is formed as a recess inwardly of the edge.
28. A tissue anchor as claimed at any one of claims 18 to 27 wherein the locking member is inclined with respect to the base.
29. A tissue anchor as claimed at any one of claims 17 to 28 wherein the head has a barbed configuration.
30. A tissue anchor as claimed at claim 29 wherein the barbed configuration of the head is defined by a set of prongs, said prongs being located in substantially equi-distant spacing around the central axis of the head, said prongs being divergent away from the end of the head in the direction of base.
31. A tissue anchor as claimed at claim 30 wherein the prongs are of a tapered configuration.
32. A tissue anchor as claimed at claim 31 wherein the outer end of the prongs are pointed.
33. A tissue anchor as claimed at any one of claims 30 to 32 wherein the prongs are resiliently flexible along their length.
34. A tissue anchor substantially as herein described with reference to the accompanying
35. A holder adapted to support the anchor as claimed at any one of claims 17 to 34 comprising a socket configured to clampingly receive the base, the

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socket being configured to allow access to the aperture, the clamping engagement between the holder and the base being such that on relative movement between the holder and the anchor the anchor is able to be disengaged from the holder.

36. A holder as claimed at claim 35 wherein the base has a substantially laminar-like configuration comprising two opposed substantially parallel faces.
37. A holder as claimed at claim 35 wherein the socket comprises a pair of spaced elements which receive opposed sides of the base with the aperture between the spaced elements.
38. A holder as claimed at claim 36 wherein the socket comprises a pair of spaced elements which receive opposed sides of the base with the aperture between the spaced elements.
39. A holder as claimed at claim 35 or 37 wherein the socket is defined by a set of boss elements which are configured to receive the free ends of the prongs of the tissue anchor as claimed at any one of claims 30 to 34 when compressed radially with respect to the central axis of the anchor.
40. A holder as claimed at any one of claims 35 to 39 supporting the anchor of the form as claimed at any one of claims 17 to 34 is provided as single element.
41. A holder as claimed at claim 40 including a length of said filamentary element supported by the anchor.
42. A pair of holders of the form as claimed at claim 41 supporting between themselves the length of the filamentary element.
43. A holder substantially as herein described with reference to the accompanying drawings.
44. An insertion appliance comprising a shaft adapted to accommodate at one end the holder as claimed at any one of claims 35 to 40, the other end of

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the shaft supporting a handle, an ejection means extending between the one end and the handle, a bearing member provided at the one end and a manipulation means provided adjacent the handle whereby on an anchor of the form as claimed at any one of claims 17 to 34 being installed in the holder and on activation of the manipulation means the bearing member will bear upon the anchor to move the anchor from engagement with the holder.

45. An insertion appliance as claimed at claim 44 supporting the holder as claimed at any one of claims 35 to 43 and the holder supporting the anchor as claimed at any one of claims 27 to 34 provided as a single element.
46. An insertion appliance as claimed at claim 45 including a length of said filamentary element supported by the anchor.
47. A pair of insertion appliances of the form as claimed at claim 46 supporting between themselves the length of the filamentary element.
48. An insertion appliance as claimed at claim 48 provided with a pair of said holders which support between themselves the length of the filamentary element.
49. An insertion appliance substantially as herein described with reference to the accompanying drawings.